

CLAIMS

What is claimed is:

1. A cooling system for an imaging device, the imaging device comprising a light source for exposing a media, the system comprising:

5 a filter for purifying a coolant flowing in the cooling system; and
 a filter bypass for limiting a purity of the coolant.

2. A cooling system as claimed in claim 1, wherein the coolant is water.

3. A cooling system as claimed in claim 1, wherein the imaging device comprises a laser source and a modulator for selectively exposing a media.

10 4. A cooling system as claimed in claim 3, wherein the media is a plate or film for an offset printing system.

5. A cooling system as claimed in claim 1, wherein the cooling system further comprises a chiller for removing heat from the coolant.

15 6. A cooling system as claimed in claim 1, wherein the cooling system further comprises a circulating pump for moving the coolant through a chiller loop of the cooling system.

7. A cooling system as claimed in claim 1, wherein a chiller loop of the cooling system is a closed loop system.

8. A cooling system as claimed in claim 1, further comprising a valve in the filter bypass for controlling a flow of coolant through the filter bypass.

20 9. A cooling system as claimed in claim 1, wherein the valve is a dose valve providing a stable flow rate of coolant through the filter bypass.

10. A method for controlling purity of a coolant of a cooling system for an imaging device for exposing a media, the method comprising:

25 purifying the coolant flowing in the cooling system; and
 partially bypassing a filter to limit a purity of the coolant.

11. A method as claimed in claim 10, further comprising making a coolant loop a closed loop.

12. A method as claimed in claim 10, further comprising regulating a flow of coolant bypassing the filter.

5 13. A method as claimed in claim 10, further comprising stabilizing a flow of coolant bypassing the filter for a range of pressures.

14. A filter with a bypass, the filter comprising:

a canister for containing a filter material; and

10 a canister cover including an inflow port for providing a coolant from an input line into the canister, an outflow port for conveying coolant out of the canister to an output line, and bypass for allowing coolant to flow from the input line to the output line, bypassing a filter media in the canister.

15. A filter as claimed in claim 14, further comprising a valve in the bypass for controlling a flow of coolant through the bypass.

15 16. A filter as claimed in claim 15, wherein the valve is a diode valve providing a stable flow rate of coolant through the bypass.

17. A filter as claimed in claim 14, wherein the bypass is formed through the canister cover.